

In the Claims:

1. (original) For use with a two-way wireless messaging system, an application controller distributed, at least in part, among a plurality communication units associated with said two-way wireless messaging system, said application controller capable of controlling cooperative communication among ones of said plurality of communication units in accordance with a prescribed application task, said application controller comprising:

a first communication unit controller that senses change in a characteristic monitored at a first communication unit, said monitored characteristic evaluated in accordance with said prescribed application task, and, in response thereto, automatically causes said first communication unit to transmit a first data signal;

an operations controller that analyzes said first data signal in accordance with said prescribed application task using at least one subscriber profile, and, in response thereto, causes a second data signal to be communicated automatically to at least a second communication unit; and

a second communication unit controller that automatically analyzes said second data signal at said second communication unit, and, in response thereto, transmits an acknowledgment signal to at least said first communication unit.

2. (original) The application controller set forth in Claim 1 wherein said two-way wireless messaging system includes at least one base station that communicates with at least one of said first communication unit and said second communication unit.

3. (original) The application controller set forth in Claim 2 wherein said at least one base station comprises:

a transmitter that is capable of transmitting messages in a forward-channel having a first frequency range;

a receiver that is capable of receiving messages in a reverse-channel having a second frequency range; and

an antenna that is capable of transmitting said forward-channel messages at a first angle of electrical downtilt below horizon and receiving said reverse-channel messages at a second angle of electrical downtilt, wherein said second angle of electrical downtilt is less than said first angle of electrical downtilt.

4. (original) The application controller set forth in Claim 1 wherein said second data signal is communicated automatically to said second communication unit and at least a third communication unit.

5. (original) The application controller set forth in Claim 4 wherein said second data signal is communicated concurrently to said second communication unit and said third communication unit.

6. (original) The application controller set forth in Claim 4 wherein said second communication unit transmits said acknowledgment signal to said first communication unit and said third communication unit.

7. (original) The application controller set forth in Claim 6 wherein said acknowledgment signal is transmitted concurrently to said first communication unit and said third communication unit.

8. (original) The application controller set forth in Claim 1 wherein said prescribed application task is one of a calendaring task, an environmental monitoring task, an automation task, and a security task.

9. (original) The application controller set forth in Claim 4 wherein said prescribed application task is one of a calendaring task, an environmental monitoring task, an automation task, and a security task.

10. (original) The application controller set forth in Claim 1 wherein said operations

controller is associated with a data repository that maintains said at least one subscriber profile.

11. (original) For use with a two-way wireless messaging system, an application controller distributed among at least three communication units associated with said two-way wireless messaging system, said application controller capable of controlling cooperative communication among said at least three communication units in accordance with a prescribed application task, said application controller comprising:

a first communication unit controller that:

senses change in characteristics monitored at a first communication unit, said monitored characteristics evaluated in accordance with said prescribed application task, and
causes automatically, in response to one of said monitored characteristics exceeding an associated threshold, said first communication unit to transmit a first data signal;

an operations controller that analyzes said first data signal in accordance with said prescribed application task using a subscriber profile, and, in response thereto, causes a second data signal to be communicated automatically to at least a second communication unit and a third communication unit; and

a communication unit controller that automatically analyzes said second data signal at each of said second communication unit and said third communication unit, and, in response thereto, transmits an acknowledgment signal to at least said first communication unit.

12. (original) The application controller set forth in Claim 11 wherein said two-way wireless messaging system includes at least one base station that communicates with at least one of said at least three communication units.

13. (original) The application controller set forth in Claim 12 wherein said at least one base station comprises:

a transmitter that is capable of transmitting messages in a forward-channel having a

first frequency range;

a receiver that is capable of receiving messages in a reverse-channel having a second frequency range; and

an antenna that is capable of transmitting said forward-channel messages at a first angle of electrical downtilt below horizon and receiving said reverse-channel messages at a second angle of electrical downtilt, wherein said second angle of electrical downtilt is less than said first angle of electrical downtilt.

14. (original) The application controller set forth in Claim 11 wherein said second data signal is communicated concurrently to said second communication unit and said third communication unit.

15. (original) The application controller set forth in Claim 11 wherein said second communication unit transmits said acknowledgment signal to said first communication unit and said third communication unit.

16. (original) The application controller set forth in Claim 11 wherein said prescribed application task is one of a calendaring task, an environmental monitoring task, an automation task, and a security task.

17. (original) The application controller set forth in Claim 13 wherein said two-way wireless messaging system includes at least one gateway that enables at least one of said at least three communication units to communicate over said two-way wireless messaging system using a computer network.

18. (original) The application controller set forth in Claim 17 wherein said computer network is one of an intra network and the Internet.

19. (original) The application controller set forth in Claim 11 wherein said two-way wireless messaging system includes at least two antennas, each capable of transmitting forward-

channel messages at a first angle of electrical downtilt below horizon and receiving reverse-channel messages at a second angle of electrical downtilt, wherein said second angles of electrical downtilt are respectively less than said first angles of electrical downtilt.

20. (original) The application controller set forth in Claim 19 wherein at least one of said at least three communication units is receiving forward-channel messages from a first one of said two antennas while transmitting interleaved reverse-channel messages to a second one of said two antennas, and said operations controller controls communication with said at least one of said communication units using said two antennas cooperatively.

21. (currently amended) For use with a two-way wireless messaging system, a method of operating an application controller that is distributed, at least in part, among a plurality of communication units associated with said two-way wireless messaging system, said application controller being capable of controlling cooperative communication among ones of said plurality of communication units in accordance with a prescribed application task, said method of operation comprising the steps of:

sensing change in a characteristic monitored at a first communication unit, said monitored characteristic evaluated in accordance with said prescribed application task;

causing, in response thereto, said first communication unit to transmit automatically a first data signal;

~~remotely~~ analyzing said first data signal in accordance with said prescribed application task using at least one subscriber profile, and causing, in response thereto, a second data signal to be communicated automatically to at least a second communication unit such that said analysis of said first data signal is performed remotely with respect to said second communications unit;

automatically analyzing said second data signal at said second communication unit;
and

transmitting, in response thereto, an acknowledgment signal to at least said first

communication unit.

22. (original) The method of operation set forth in Claim 21 wherein said two-way wireless messaging system includes at least one base station and said method of operation comprises a further step of communicating with at least one of said first communication unit and said second communication unit using said base station.

23. (original) The method of operation set forth in Claim 22 wherein said at least one base station comprises an antenna, and said method of operation comprises the steps of:

transmitting forward-channel messages from said antenna at a first angle of electrical downtilt below horizon; and

receiving reverse-channel messages at said antenna at a second angle of electrical downtilt, wherein said second angle of electrical downtilt is less than said first angle of electrical downtilt.

24. (original) The method of operation set forth in Claim 21 wherein said two-way wireless messaging system includes two antennas, each antenna capable of transmitting forward-channel messages at a first angle of electrical downtilt below horizon and receiving reverse-channel messages at a second angle of electrical downtilt, said second angles of electrical downtilt are respectively less than said first angles of electrical downtilt, said method of operation comprising the steps of:

receiving at one of said first communication unit and said second communication unit forward-channel messages from a first antenna;

transmitting from said one of said first communication unit and said second communication unit reverse-channel messages to a second antenna; and

controlling communication with said one of said first communication unit and said second communication unit using said two antennas cooperatively.

25. (original) The method of operation set forth in Claim 21 further comprising the step

of communicating automatically said second data signal to said second communication unit and at least a third communication unit.

26. (original) The method of operation set forth in Claim 25 further comprising the step of communicating concurrently said second data signal to said second communication unit and said third communication unit.

27. (original) The method of operation set forth in Claim 25 further comprising the step of transmitting said acknowledgment signal from said second communication unit to said first communication unit and said third communication unit.

28. (original) The method of operation set forth in Claim 27 further comprising the step of transmitting concurrently said acknowledgment signal to said first communication unit and said third communication unit.

29. (original) The method of operation set forth in Claim 21 wherein said prescribed application task is one of a calendaring task, an environmental monitoring task, an automation task, and a security task.

30. (original) The method of operation set forth in Claim 25 wherein said prescribed application task is one of a calendaring task, an environmental monitoring task, an automation task, and a security task.

31. (original) The method of operation set forth in Claim 21 further comprising the step of maintaining said at least one subscriber profile in a data repository associated with said two-way wireless messaging system.

32. (original) For use with a two-way wireless messaging system, a method of operating an application controller that is distributed, at least in part, among at least three communication units associated with said two-way wireless messaging system, said application controller being capable of

controlling cooperative communication among said at least three communication units in accordance with a prescribed application task, said method of operation comprising the steps of:

sensing change in characteristics monitored at a first communication unit using a first communication unit controller, said monitored characteristics evaluated in accordance with said prescribed application task;

automatically causing, in response to one of said monitored characteristics exceeding an associated threshold, said first communication unit to transmit a first data signal;

analyzing said first data signal in accordance with said prescribed application task using an operations controller in association with a subscriber profile, and, in response thereto, causing a second data signal to be communicated automatically to at least a second communication unit and a third communication unit; and

automatically analyzing said second data signal at each of said second communication unit and said third communication unit using a communication unit controller, and, in response thereto, transmitting an acknowledgment signal to at least said first communication unit.

33. (original) The method of operation set forth in Claim 32 wherein said two-way wireless messaging system includes at least one base station, and said method of operation further comprises the step of communicating with at least one of said at least three communication units using said base station.

34. (original) The method of operation set forth in Claim 33 wherein said at least one base station comprises an antenna, and said method of operation comprises the steps of:

transmitting forward-channel messages from said antenna at a first angle of electrical downtilt below horizon; and

receiving reverse-channel messages at said antenna at a second angle of electrical downtilt, wherein said second angle of electrical downtilt is less than said first angle of electrical downtilt.

35. (original) The method of operation set forth in Claim 32 further comprising the step of communicating said second data signal concurrently to said second communication unit and said third communication unit.

36. (original) The method of operation set forth in Claim 32 further comprising the step of transmitting said acknowledgment signal from said second communication unit to said first communication unit and said third communication unit.

37. (original) The method of operation set forth in Claim 32 wherein said prescribed application task is one of a calendaring task, an environmental monitoring task, an automation task, and a security task.

38. (original) The method of operation set forth in Claim 34 wherein said two-way wireless messaging system includes at least one gateway, and said method of operation further comprises the step of using said at least one gateway to enable at least one of said at least three communication units to communicate over said two-way wireless messaging system using a computer network.

39. (original) The method of operation set forth in Claim 38 wherein said computer network is one of an intra network and the Internet.

40. (original) The method of operation set forth in Claim 32 wherein said two-way wireless messaging system includes two antennas, each antenna capable of transmitting forward-channel messages at a first angle of electrical downtilt below horizon and receiving reverse-channel messages at a second angle of electrical downtilt, said second angles of electrical downtilt are respectively less than said first angles of electrical downtilt, said method of operation comprising the steps of:

receiving at one of said three communication units forward-channel messages from a first antenna;

transmitting from said one of said three communication units reverse-channel

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messages to a second antenna; and

controlling communication with said one of said three communication units using
said two antennas cooperatively.